## Abstract of the Disclosure

The invention provides a vascular access system and methods for facilitating long-term, repeated access to any of a patient's vascular systems. This is provided by an access tube apparatus adapted for anastomosis to an anatomical vessel. The access tube is occluded with an fluid occluder that fits within the conduit of the access tube in between treatments or when vascular access is otherwise not needed. When such access is desired, the fluid occluder is withdrawn from the access tube and the body fluid is accessed through the access tube.